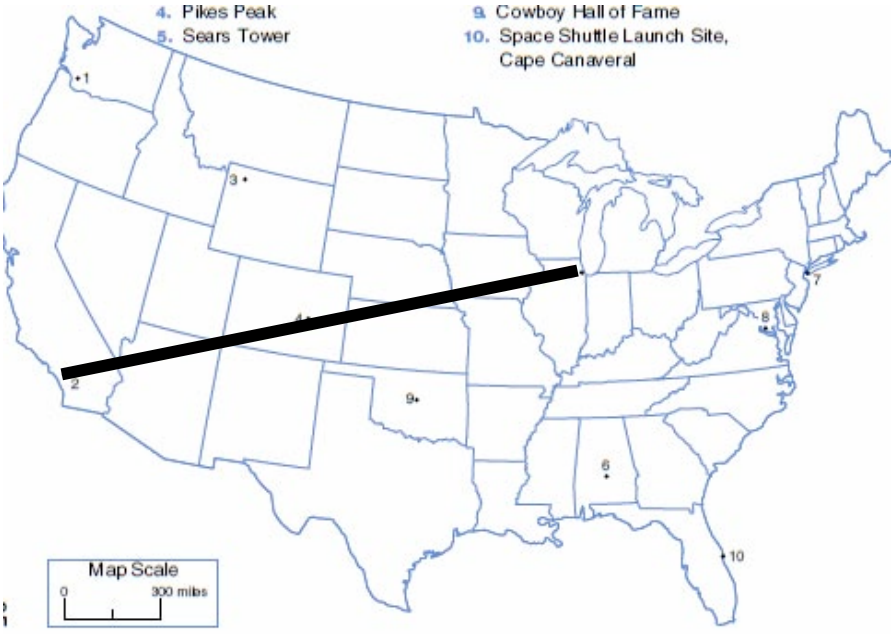
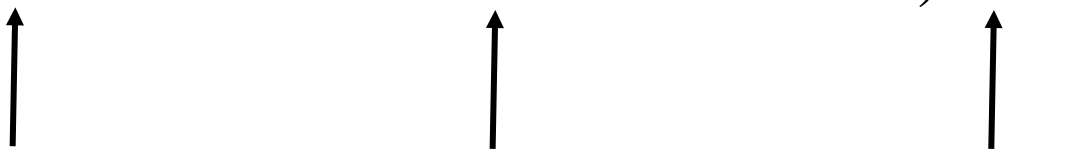
Array – an arrangement of objects in a regular pattern, usually rows and columns; an array is usually a rectangular array

"As the crow flies" – a straight distance between two objects on a map, not considering land features that might be in the way of traveling over land such as lakes or mountains or forests; it's the straight path between two objects in the air



Dividend – The number in division that is being divided.

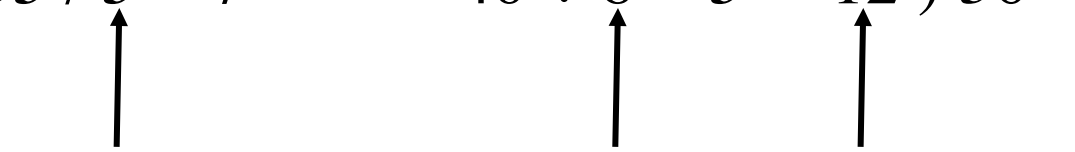
$35 / 5 = 7$ $40 \div 8 = 5$ $12 \overline{)\,36}$ (3)



dividend **dividend** **dividend**

Divisor – The number that divides another number in division.

$35 / 5 = 7$ $40 \div 8 = 5$ $12 \overline{)\,36}$ (3)

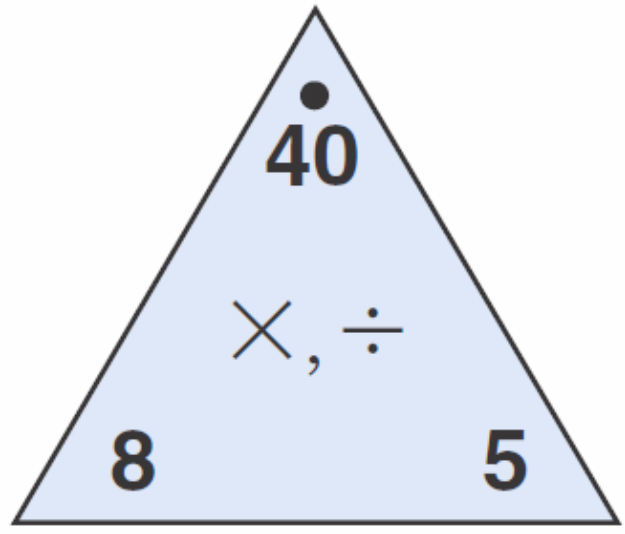


divisor **divisor** **divisor**

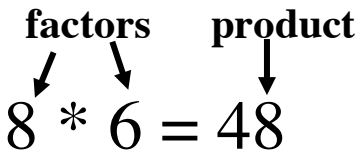
Equally Likely Outcomes – outcomes of a chance experiment or situation that have the same probability of happening

It's 50-50, heads or tails, every time!

Fact Power – the ability to automatically recall basic arithmetic facts



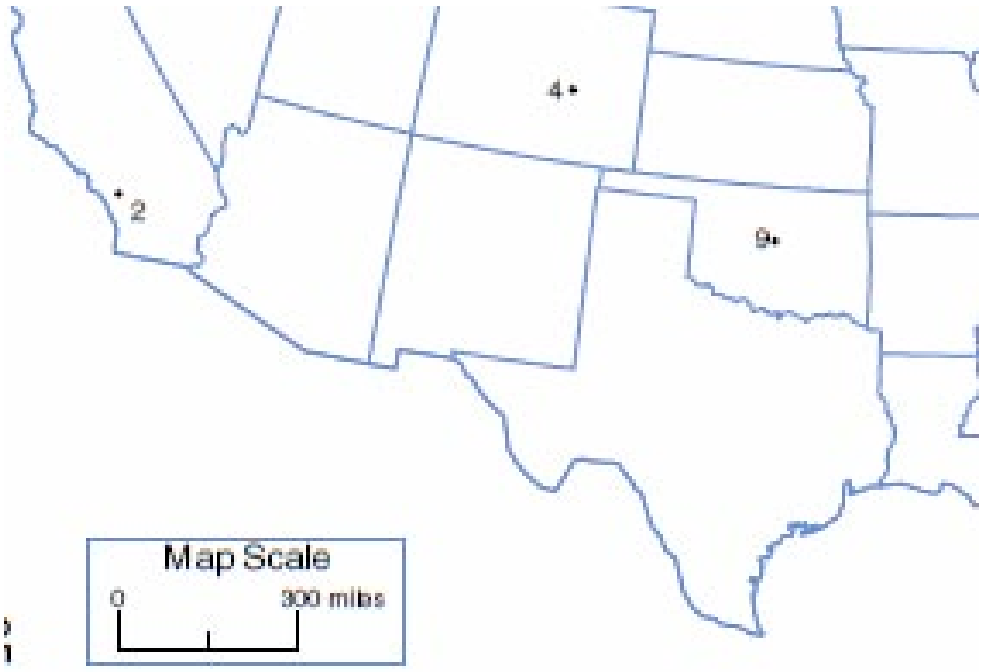
Factor – each of the two or more numbers in a product; as a verb, it also means to represent a number as a product of factors



Fair Game – a game in which every player has the same chance of winning

Heads – the side of the coin that has the head of a president

Map Scale – The ratio of distance on a map, globe, or drawing to an actual inch.

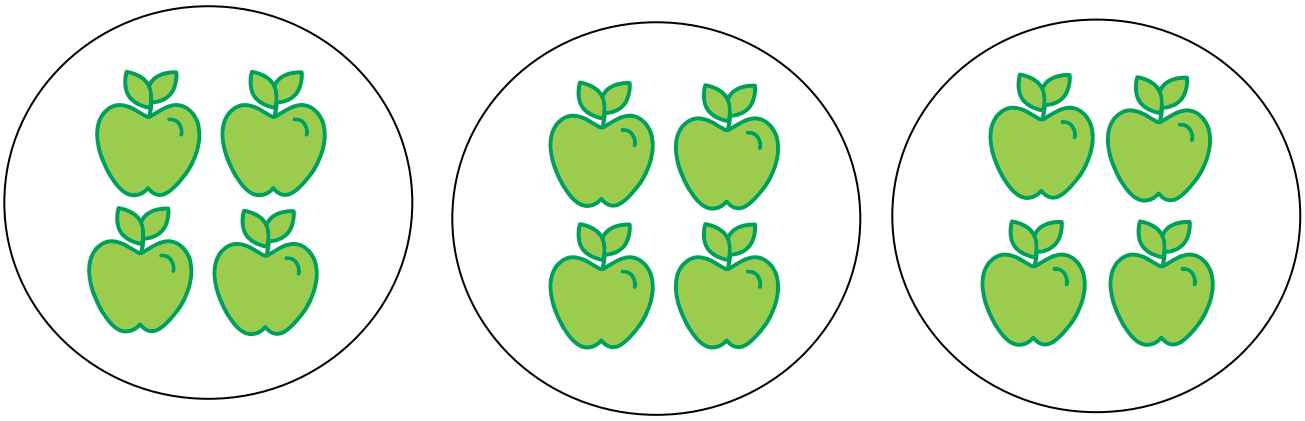


Multiples – the product of an integer with another integer

Multiples of 7 = 0, 7, 14, 21, 28, etc

Multiples of 5 = 0, 5, 10, 15, 20, etc

Multiplication – a method of finding the total number of objects in several equal groups



3 groups of 4 apples = 12 apples

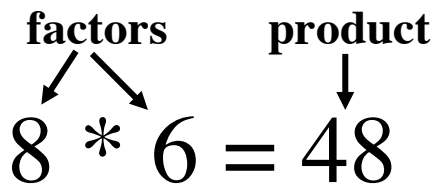
Multiplication/Division Diagram – a diagram used to model situations in which a total number is made up of equal-size groups

rows	chairs per row	chairs in all
15	25	?

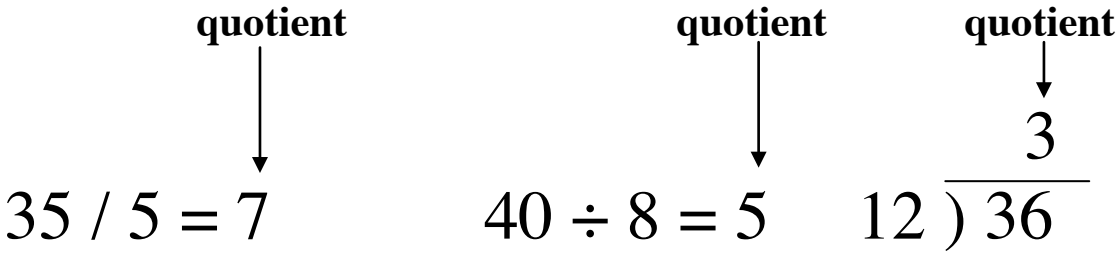
Multiplication/Division Fact Table

Multiplication/Division Facts Table										
×,÷	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

Product – the result of multiplying two numbers, called factors



Quotient – the result of dividing one number by another number. The "answer" for division

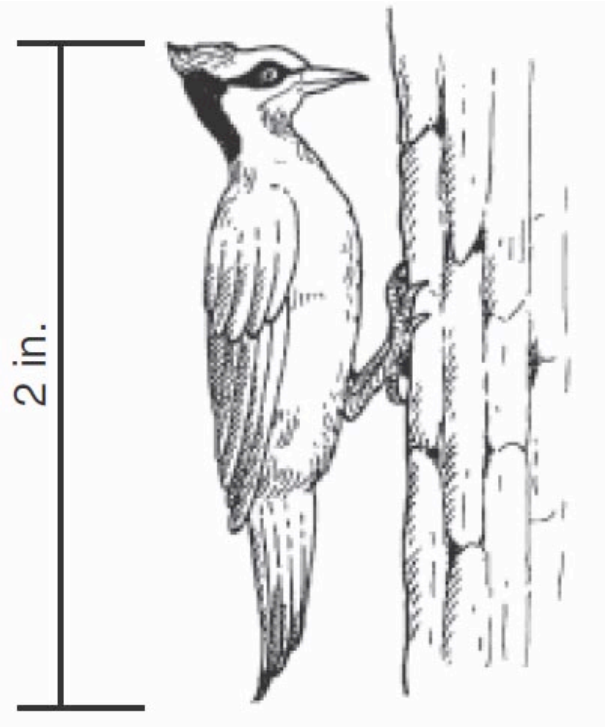


Remainder – the amount left over when one number is divided by another number.

remainder **remainder** **remainder**

35 / 4 = 8 R3 40 ÷ 9 = 6 R4 10) 36 → 3 R6

Scale Factor – the ratio of lengths on an image and corresponding lengths on a preimage in a size change



A woodpecker (8 in.) to $\frac{1}{4}$ scale

Square Numbers – figurative numbers that are the product of a counting number and itself

4 * 4 = 16

3 * 3 = 9

2 * 2 = 4

Tails – the non-head side of a coin

Turn-around Shortcut – ways to use facts you know to learn other facts

Shortcuts

Here are some ways to use facts you know to learn new facts. They are called shortcuts.

Plus 0: If 0 is added to a number, the number is not changed.
Examples $6 + 0 = 6$ $0 + 812 = 812$

Minus 0: If 0 is subtracted from a number, the number is not changed.
Examples $6 - 0 = 6$ $1{,}999 - 0 = 1{,}999$

Times 0: If a number is multiplied by 0, the answer is 0.
Examples $6 \times 0 = 0$ $0 \times 46 = 0$ $1{,}999 \times 0 = 0$

Times 1: If a number is multiplied by 1, the number is not changed.
Examples $1 \times 6 = 6$ $46 \times 1 = 46$ $1 \times 812 = 812$

Times 5: To multiply by 5, think "nickels."
Example $7 \times 5 = ?$ 7 nickels is 35¢. So $7 \times 5 = 35$.